TU

UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,321	03/17/2004	Stefan Bengt Edlund	IBM-014	3735

51835	7590	10/12/2006

IBM LOTUS & RATIONAL SW
c/o GUERIN & RODRIGUEZ
5 MOUNT ROYAL AVENUE
MOUNT ROYAL OFFICE PARK
MARLBOROUGH, MA 01752

EXAMINER
RAYYAN, SUSAN F

ART UNIT	PAPER NUMBER
2167	

DATE MAILED: 10/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
	10/802,321	EDLUND ET AL.
Office Action Summary	Examiner	Art Unit
	Susan F. Rayyan	2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *17 March 2004*.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-27* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-27* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *17 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-27 are pending.

Claim Rejections - 35 USC § 101

2.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 21-25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language of the claim raises a question as to whether the claim is directed merely to an environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C 101.

Claims 21-25 the "a computer data signal embodied in a carrier wave" appear to be non-statutory . Transmission media can also take the form of **carrier waves**; i.e., electromagnetic waves that can be modulated, as in frequency, amplitude or phase, to transmit information signals"

Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded

with functional descriptive material falls within any of the categories of patentable

subject matter set forth in § 101.

First, a claimed signal is clearly not a "process" under § 101 because it

is not a series of steps. The other three § 101 classes of machine,

compositions of matter and manufactures "relate to structural entities and

can be grouped as 'product' claims in order to contrast them with process

claims." 1 D. Chisum, Patents § 1.02 (1994). The three product classes have

traditionally required physical structure or material.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 4-17, 19-22, 24-27 rejected under 35 U.S.C. 103(a) as being

unpatentable over US Patent Publication Number 2003/0172113 A1 issued to

Brian A. Cameron et al ("Cameron") in view of US Patent Number 2003/0158866

A1 issued to James P. Goodwin et al ("Goodwin").

As per independent claim 1, Cameron teaches a method for synchronizing a client

having a client database with a server having a server database and transmitting

documents (paragraph 7, lines 4-8, synchronizing documents between server and

client).

Cameron does not explicitly teach calculating a document score for each of a

plurality of documents in the server database, the document score designating an

importance of the document to the client and transmitting one of the documents in the

server database to the client based on a respective document score. Goodwin does

teach these limitations (paragraph 109, lines 22-26 as document score used to bring

documents to the user and paragraph 69 as threshold value) to maintain current

information. It would have been obvious to one of ordinary skill in the art at the time of

the invention to modify Cameron with calculating a document score for each of a

plurality of documents in the server database, the document score designating an

importance of the document to the client and transmitting one of the documents to

maintain current information (paragraph 43, lines 6-7).

As per claim 2, same as claim arguments above and Goodwin teaches:

wherein the transmitting comprises transmitting the one of the documents in the server

database to the client if the respective document score exceeds a threshold value

(paragraph 69, threshold value).

As per claim 4 same as claim arguments above and Goodwin teaches:

wherein the calculating a document score for one of the documents is determined from

at least one of a time of creation of the document, a number of times the document has

been read, a time of last access of the document, an author of the document and a term

in the document (paragraph 109, lines 8-13 , last update, times opened).

As per claim 5 same as claim arguments above and Goodwin teaches:

wherein the calculating a document score is determined from a relationship between the

document and another of the documents in the server database(paragraph 114,

relationship between documents).

As per claim 6 same as claim arguments above and Cameron teaches:

wherein the transmitting comprises transmitting one of the documents in the server

database to the client ... if the one of the documents is not stored in the client database

(paragraph 8,10, server documents are downloaded to the client (small device)).

Cameron does not explicitly teach a document score Goodwin does teach these

limitations (paragraph 109, lines 22-26 as document score used to bring documents to

the user and paragraph 69 as threshold value) to maintain current information. It would

have been obvious to one of ordinary skill in the art at the time of the invention to modify

Cameron with a document score transmitting one of the documents to maintain current

information (paragraph 43, lines 6-7).

As per claim 7 same as claim arguments above and Cameron teaches:

determining if the client database includes a newly created document and transmitting

the newly created document to the server (paragraph 42, lines 1-5, synchronizing

document additions).

As per claim 8 same as claim arguments above and Goodwin teaches:

further comprising assigning a document score having a maximum value to the newly

created document (paragraph 67, lines 21-23, authoring a document is given a high

weight).

As per claim 9 same as claim arguments above and Cameron teaches:

determining if the client database includes a modified document and transmitting the

modified document to the server (paragraph 28, edited documents on client are

transmitted to the server).

As per claim 10 same as claim arguments above and Goodwin teaches:

further comprising assigning a document score having a maximum value to the modified

document (paragraph 109, lines 1-13 as document parameters are assigned weights

which are used to compute the document score).

As per claim 11 same as claim arguments above and Goodwin teaches:

wherein the client database includes a plurality of client documents, the method further

comprising designating for deletion one of the client documents based on a document

score of a complementary document in the server database (paragraph 109, lines 22-

26, documents sent to user based on document score).

As per claim 12 same as claim arguments above and Cameron teaches:

wherein the client database includes a plurality of client documents, the method further

comprising removing one of the client documents from the client database... of a

complementary document in the server database (paragraph 12, deleting document

from client).

As per claim 13 same as claim arguments above and Goodwin teaches:

further comprising resolving a conflict between the modified document in the client

database and a modified document in the server database (paragraph 100, conflicting

parts of documents are resolved).

As per claim 14 same as claim arguments above and Cameron teaches:

further comprising removing the designation for deletion based on a document score of

the complementary document in the server database (paragraph 12, updating

document).

As per claim 15 same as claim arguments above and Cameron teaches:

further comprising increasing a data storage capacity of the client by deleting the one of

the client documents designated for deletion (paragraph 12, deleted documents

increase the storage capacity).

As per independent claim 16 Cameron teaches;

A computer program product for use with a computer system having a server with a

server database, the server database storing a plurality of documents accessible to a

client(paragraph 7, lines 4-8, synchronizing documents between server and client).

Cameron does not explicitly teach program code for calculating a document score for

each of the documents, the document score designating an importance of the document

to a client; and program code for transmitting one of the documents in the server

database to the client based on a respective document score.

Goodwin does teach these limitations (paragraph 109, lines 22-26 as document score

used to bring documents t the user and paragraph 69 as threshold value) to maintain

current information. It would have been obvious to one of ordinary skill in the art at the

time of the invention to modify Cameron with program code for calculating a document

score for each of the documents, the document score designating an importance of the

document to a client; and program code for transmitting one of the documents in the

server database to the client based on a respective document score.

to maintain current information (paragraph 43, lines 6-7).

As per claim 17 same as claim arguments above and Goodwin teaches:

wherein the program code embodied in the computer useable medium further

comprises program code for determining a threshold value, the one of the documents in

the server database being transmitted to the client if the respective document score

exceeds the threshold value(paragraph 69, threshold value).

As per claim 19 same as claim arguments above and Goodwin teaches:

wherein the calculating a document score for one of the documents is determined from

at least one of a time of creation of the document, a number of times the document has

been read, a time of last access of the document, an author of the document and a term

in the document(paragraph 109, lines 8-13 , last update, times opened).

As per claim 20 same as claim arguments above and Goodwin teaches:

wherein the calculating a document score is determined from a relationship between the

document and another of the documents in the server database(paragraph 114,

relationship between documents).

As per independent claim 21 Cameron teaches;

A computer data signal embodied in a carrier wave for use with a computer system

having a server with a server database, the server database storing a plurality of

documents accessible to a client, the computer data signal (paragraph 7, lines 4-8,

synchronizing documents between server and client).

Cameron does not explicitly teach program code for calculating a document score for

each of the documents, the document score designating an importance of the document

to a client; and program code for transmitting one of the documents in the server

database to the client based on the document score.

Goodwin does teach these limitations (paragraph 109, lines 22-26 as document

score used to bring documents to the user and paragraph 69 as threshold value) to

maintain current information. It would have been obvious to one of ordinary skill in the

art at the time of the invention to modify Cameron with program code for calculating a

document score for each of the documents, the document score designating an

importance of the document to a client; and program code for transmitting one of the

documents in the server database to the client based on the document score to the

client based on a respective document score to maintain current information (paragraph

-43, lines 6-7).

As per claim 22 same as claim arguments above and Goodwin teaches:

further comprising program code for determining a threshold value, the one of the

documents in the server database being transmitted to the client if the respective

document score exceeds the threshold value(paragraph 69, threshold value).

As per claim 24 same as claim arguments above and Goodwin teaches:

wherein the calculating a document score for one of the documents is determined from

at least one of a time of creation of the document, a number of times the document has

been read, a time of last access of the document, an author of the document and a term

in the document (paragraph 109, lines 8-13 , last update, times opened)..

As per claim 25 same as claim arguments above and Goodwin teaches:

wherein the calculating a document score same as claim arguments above and

is determined from a relationship between the document and another of the documents

in the server database (paragraph 114, relationship between documents).

As per independent claim 26 Cameron teaches:

An apparatus for synchronizing a client having a client database with a server having a

server database(paragraph 7, lines 4-8, synchronizing documents between server and

client), the apparatus comprising:

Cameron does not explicitly teach means for calculating a document score for each

of a plurality of documents in the server database, the document score designating an

importance of the document to the client; and means for transmitting one of the

documents in the server database to the client based on a respective document score.

Goodwin does teach these limitations (paragraph 109, lines 22-26 as document

score used to bring documents t the user and paragraph 69 as threshold value) to

maintain current information. It would have been obvious to one of ordinary skill in the

art at the time of the invention to modify Cameron with calculating a document score for

each of a plurality of documents in the server database, the document score

designating an importance of the document to the client; and means for transmitting one

of the documents in the server database to the client based on a respective document

score to maintain current information (paragraph 43, lines 6-7).

As per claim 27 same as claim arguments above and Goodwin teaches:

further comprising means for determining a threshold value, the one of the documents

in the server database being transmitted to the client if the respective document score

exceeds the threshold value(paragraph 69, threshold value).

Claims 3,18,23 are rejected under 35 U.S.C. 103(a) as being unpatentable

over US Patent Publication Number 2003/0172113 A1 issued to Brian A. Cameron

et al ("Cameron") in view of US Patent Number 2003/0158899 A1 issued to James

P. Goodwin et al ("Goodwin") in view of US Patent Number 7,092,977 B2 issued to

Albert Leung et al ("Leung").

As per claim 3 same as claim arguments above and Cameron and Goodwin do not explicitly teach the threshold value based on a data storage capacity of the client. Leung does teach this limitation (page 9 lines 25-30, storage capacity threshold) to provide efficient data access while optimizing storage resources. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Cameron and Goodwin with the threshold value based on a data storage capacity of the client to provide efficient data access while optimizing storage resources (Abstract).

As per claim 18 same as claim arguments above and Cameron and Goodwin do not explicitly teach wherein the determination of the threshold value is based on a data storage capacity of the client. Leung does teach this limitation (page 9 lines 25-30, storage capacity threshold) to provide efficient data access while optimizing storage resources. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Cameron and Goodwin with the determination of the threshold value is based on a data storage capacity of the client to provide efficient data access while optimizing storage resources (Abstract).

As per claim 23 same as claim arguments above and Cameron and Goodwin do not explicitly teach wherein the determination of the threshold value is based on a data storage capacity of the client. Leung does teach this limitation (page 9 lines 25-30, storage capacity threshold) to provide efficient data access while optimizing storage

resources. It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify Cameron and Goodwin with the determination of the threshold value

is based on a data storage capacity of the client to provide efficient data access while

optimizing storage resources (Abstract).

Contact Information

4.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Susan Rayyan whose telephone number is (571) 272-

1675. The examiner can normally be reached M-F: 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone

number for the organization where this application or proceeding is assigned is

703-872-9306.

Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR

only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Susan Rayyan

September 22, 2006

JOHN COTTINGHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100